

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-9. (Canceled)

10. (Currently amended) A fuel processor comprising:

a fuel reforming unit having a fluid inlet for varying the rate of input of a first stream of a fluid into the fuel reforming unit;

a hydrogen-cleanup unit having a fluid inlet for varying the rate of input of a second stream of the fluid into the hydrogen-cleanup unit;

a fluid conduit for providing the fluid to a fuel cell, the fluid conduit having a fluid inlet for varying the rate of input of a third stream of the fluid into the fuel cell;

a first sensor associated with the fuel reforming unit;

a second sensor associated with the hydrogen-cleanup unit;

a third sensor associated with the fuel cell, wherein at least one of the first sensor, the second sensor, or the third sensor is not a fluid flow rate sensor; and

a control system ~~regulating~~ configured to regulate the rate of the first fluid stream based upon feedback from the first sensor, ~~wherein such regulation occurs with a first time constant, the control system further regulating~~ and regulate the rate of the second fluid stream and the third fluid stream based upon the feedback from the second sensor and the third sensor respectively, ~~wherein the regulation of at least one of the second fluid stream and the third fluid stream occurs with a time constant that is at least about three times greater than the time constant of regulation of the first fluid stream.~~

11. (Previously presented) The fuel processor of claim 10, wherein the first sensor comprises a fluid flow rate sensor.

12. (Original) The fuel processor of claim 10 wherein the fluid is air.

13. (Previously presented) The fuel processor of claim 12 wherein the control system varies the rate of the first fluid stream by controlling a compressor coupled to the first inlet.

14. (Original) The fuel processor of claim 13 wherein the air from the compressor is fed to a plenum, and from the plenum to a plurality of fuel processor components via at least one controllable valve.

15. (Canceled)

16. (Previously presented) The fuel processor of claim 13 wherein the rate of input of the first fluid stream is controlled by varying the output of the compressor.

17. (Previously presented) The fuel processor of claim 16 wherein the rate of input of the second fluid stream or the third fluid stream is controlled by adjusting valves associated with the hydrogen-cleanup unit and the fuel cell.

18. (Previously presented) The fuel processor of claim 10 further comprising:

a tail gas combustor having a fluid inlet for varying the rate of input of a fourth stream of the fluid, wherein the control system regulates the rate of each of the first fluid stream, the second fluid stream, the third fluid stream, and the fourth fluid stream.

19. (Original) The fuel processor of claim 10 wherein the fuel reforming unit comprises a partial oxidation reformer.

20. (Original) The fuel processor of claim 10 wherein the fuel reforming unit comprises an autothermal reformer.

21. (Original) The fuel processor of claim 10 wherein the fuel reforming unit comprises a pure steam reformer.

22. (Previously presented) The fuel processor of claim 10 wherein the hydrogen-cleanup unit comprises at least one of a water gas shift reactor and a preferential oxidation reactor.

23. (Original) The fuel processor of claim 10 wherein the fluid comprises water.

24. (Original) The fuel processor of claim 10 wherein the fluid comprises fuel.

25. (Original) The fuel processor of claim 10 wherein the control system varies the rate of fluid flow at the inlet by controlling a pump coupled to the first inlet.

26. (Previously presented) The fuel process of claim 10 wherein the feedback from the first sensor is a fuel flow rate or an air flow rate into the fuel reforming unit, or a temperature in the fuel reforming unit.

27. (Previously presented) The fuel process of claim 10 wherein the feedback from the second sensor is a temperature or a carbon monoxide concentration in the hydrogen-cleanup unit, or an air flow rate into the hydrogen cleanup unit.

28. (Previously presented) The fuel process of claim 10 wherein the feedback from the third sensor is an electricity production rate or an electricity demand rate.

29. (Previously presented) The fuel process of claim 10 wherein the second fluid stream and the third fluid stream are regulated so that the second fluid stream and the third fluid stream have a flow volume that is less than about 10% of the average flow volume of the first fluid stream.